8-8-2006

Slope Slider

Carrie Seitz
The College at Brockport

Generic Lesson Plan Template

You should submit this form in addition to any computer generated files/documents/models to your group folder on Angel. Please create a .zip file and upload the group of files as a single archive.

Name: Carrie Seitz
Grade level(s)/Subject taught: 7th Math
Objectives: Students will be able to • Identify the slope and y-intercept in an equation in the form y=mx +b • Describe the difference between lines by looking at the slope and y-intercept

Please provide a rich **one-page, single-spaced**, description or a *vision* of your best thinking on a way or ways you might teach the planned lesson. (approximately ½ page for the teacher role, ½ page for the student role). Also, construct a tentative rubric that you might use with your students (see example)

Items to include in your lesson plan: (Choose your discipline/concepts from your own area).

1. *Write* the Mathematical Concept or "key idea" that modeling will be used to teach: (e.g. Students use mathematical modeling/ multiple representation to provide a means of presenting, interpreting, communicating, and connecting mathematical information and relationships)

Algebra Standard o understand patterns, relations, and functions o represent and analyze mathematical situations and structures using algebraic symbols

Materials:

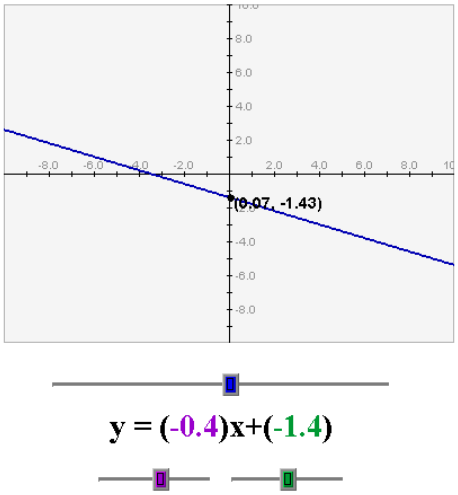
- Access Project Interactivates "Slope Slider"
- Worksheet for slope slider

- Poster paper and markers

Name _____Date_____

Slope Slider Activity

Directions: Use the purple and green sliders To adjust the line. The equation for the line Will adjust while you move it!



Find four lines that are "going up"

Y = _____ * X + _____

Y = _____ * X + _____

Y = _____ * X + _____

Y = _____ * X + _____

Find four lines that are "going down"

Y = _____ * X + _____

Y = _____ * X + _____

Y = _____ * X + _____

Y = _____ * X + _____

How do the equations look similar for

Going up?_____
_____
_____

Going down? _____
_____
_____

Find two equations that cross the y-axis *above* zero.

Y = ____ * X + ____

Y = ____ * X + ____

Find two equations that cross the y-axis *below* zero.

Y = ____ * X + ____

Y = ____ * X + ____

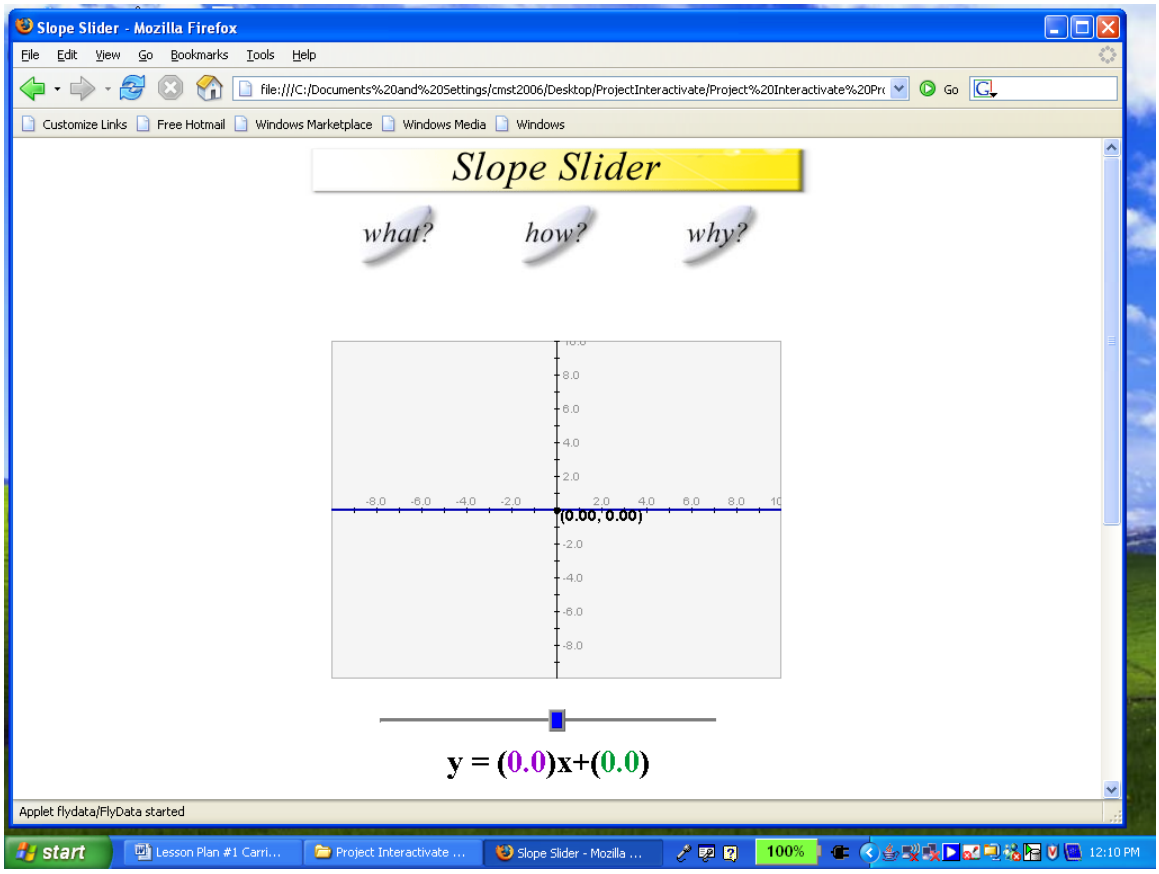
Find two equations that cross the y-axis AT zero.

Y = ____ * X + ____

Y = ____ * X + ____

Can you find a rule for where the line crosses the y-axis ?

_____


Slope Slider - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
file:///C:/Documents%20and%20Settings/cmst2006/Desktop/ProjectInteractivate/Project%20Interactivate%20Pr
Go
Customize Links Free Hotmail Windows Marketplace Windows Media Windows
Slope Slider
what?
how?
why?
8.0
6.0
4.0
2.0
-8.0 -6.0 -4.0 -2.0 2.0 4.0 6.0 8.0
(0.00, 0.00)
-2.0
-4.0
-6.0
-8.0
y = (0.0)x+(0.0)
Applet flydata/FlyData started
start
Lesson Plan #1 Carri...
Project Interactivate ...
Slope Slider - Mozilla ...
100%
12:10 PM